

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listing of claims in the application.

1-38. (Cancelled).

39. (Currently Amended) An immunogenic composition comprising an isolated protease maturation protein of *S. pneumoniae*, wherein the protein has an amino acid sequence as set forth in SEQ ID NO: 2, and/or a homologous or a protein thereof, which has an Expect value as determined by Blast or Blastp computer programs of less than 2e⁻²⁷ when compared to SEQ. ID. NO:2 wherein the protein or homologous protein has opsonophagocytic activity, and wherein the composition raises an opsonophagocytic immune response to *Streptococcus pneumoniae*.

40. (Cancelled).

41. (Previously Presented) The immunogenic composition according to claim 39, further comprising a suitable adjuvant or carrier.

42. (Previously Presented) The immunogenic composition according to claim 39, wherein the protein is the protease maturation protein from *S. pneumoniae* Ft231 or EF3296.

43. (Previously Presented) The immunogenic composition according to claim 39, wherein the protein is a purified, recombinant or synthetic protein.

44. (Currently Amended) A method for preparing of an immunogenic composition against *S. pneumoniae* comprising the steps of:

- a. isolating a protease maturation protein of *S. pneumoniae*, wherein the protein has an amino acid sequence as set forth in SEQ. ID. NO: 2, ~~and/or a homologous or a protein thereof, which has an Expect value as determined by Blast or Blastp computer programs of less than 2e-27 when compared to SEQ. ID. NO:2, wherein the protein or homologous protein has opsonophagocytic activity and wherein the protein is able to raise an opsonophagocytic immune response to *Streptococcus pneumoniae*~~; and
- b. combining the protein obtained under (a) with a suitable carrier or adjuvant.

45. (Cancelled).

46. (Previously Presented) A method for raising an immune response in a mammal against *S. pneumoniae* comprising administering a suitable dose of an immunogenic composition according to claim 39.

47. (Currently Amended) A recombinant protease maturation protein of *S. pneumoniae* comprising an amino acid sequence as set forth in SEQ. ID. NO: 2, ~~and/or a homologous or a protein thereof, which has an Expect value as determined by Blast or Blastp computer programs of less than 2e-27 when compared to SEQ. ID. NO:2, wherein the protein or homologous protein has opsonophagocytic activity and wherein the protein is able to raise an opsonophagocytic immune response to *Streptococcus pneumoniae*~~.

48. (Previously Presented) A carrier for an immunogen in a vaccine, wherein said carrier comprises an isolated protease maturation protein of *S. pneumoniae*, wherein the protein has an amino acid sequence as set forth in SEQ. ID. NO: 2, ~~and/or a homologous or a protein thereof, which has an Expect value as determined by Blast or Blastp computer programs of less than 2e-27 when compared to SEQ. ID.NO:2, and wherein the protein is able to raise an opsonophagocytic immune response to~~

Application Serial No. 10/049,473

Filing Date: July 30, 2002

Docket: 294-120 PCT/US/RCE

Page 4 of 7

Streptococcus pneumoniae wherein the protein or homologous protein has
opsonophagocytic activity.